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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO		
09/720,953 02/13/2001		Kiyotaka Tsukada	232.001 9007			
75	90 02/13/2003					
James F Boyle Boyle Fredrickson Ziolkowski 250 Plaza Suite 1030 250 East Wisconsin Avenue Milwaukee, WI 53202			EXAMINER			
			NORRIS, JEREMY C			
			ART UNIT	PAPER NUMBER		
minimadico, vi	552Vm		2827			
			DATE MAILED: 02/13/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

		A 12 42 A1		anliant(a)				
Office Action Summany		Application No.		Applicant(s)				
		09/720,953		TSUKADA ET AL.				
•	Office Action Summary	Examiner		Art Unit	M			
		Jeremy C. Nor		2827	,			
Period fo	The MAILING DATE of this communication app r Reply	ears on the cov	er sneet with the c	orresponaence addi	ress			
THE N - Exter - If the - If NO - Failur - Any re	ORTENED STATUTORY PERIOD FOR REPL'MAILING DATE OF THIS COMMUNICATION.  Issions of time may be available under the provisions of 37 CFR 1.1  SIX (6) MONTHS from the mailing date of this communication.  period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period or reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing of patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, ho y within the statutory rwill apply and will expite the application.	owever, may a reply be tim minimum of thirty (30) days re SIX (6) MONTHS from n to become ABANDONE	nely filed s will be considered timely. the mailing date of this com D (35 U.S.C. § 133).	nmunication.			
Status 1\⊠	Responsive to communication(s) filed on 06 I	November 2003	•					
1)⊠ 2a)⊟		nis action is non						
· ·	Since this application is in condition for allowa			ossecution as to the	marite is			
3) Dispositi	closed in accordance with the practice under on of Claims				mento io			
4)🖂	Claim(s) 3,5-9 and 11-17 is/are pending in the	e application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)🖂	Claim(s) <u>3,5-7,9 and 11-17</u> is/are allowed.							
6)⊠	Claim(s) 8 is/are rejected.							
7)	Claim(s) is/are objected to.							
8)[	Claim(s) are subject to restriction and/o	or election requi	rement.					
Applicati	on Papers							
,—	The specification is objected to by the Examine							
10) 🔲	The drawing(s) filed on is/are: a)□ acce	epted or b)⊡ obje	ected to by the Exa	miner.				
_	Applicant may not request that any objection to the							
11)[[	The proposed drawing correction filed on <u>04 A</u>			lisapproved by the E	xaminer.			
[]	If approved, corrected drawings are required in re		action.					
•	The oath or declaration is objected to by the Ex	xaminer.						
_	under 35 U.S.C. §§ 119 and 120							
•	Acknowledgment is made of a claim for foreig	n priority under	35 U.S.C. § 119(a	a)-(d) or (f).				
a)	☑ All b)☐ Some * c)☐ None of:							
	1. Certified copies of the priority documen							
	2. Certified copies of the priority documen							
* (	3. Copies of the certified copies of the price application from the International Bushes the attached detailed Office action for a list	ureau (PCT Rui	e 17.2(a)).		Stage			
	Acknowledgment is made of a claim for domes				application).			
a	a)  The translation of the foreign language pr Acknowledgment is made of a claim for domes	ovisional applic	ation has been re	ceived.				
Attachmer	•	pority unde	55 5,5,6, 33 12					
1) Notice 2) Notice	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449) Paper No(s)	,	Notice of Informal	y (PTO-413) Paper No(: Patent Application (PTC				

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claim 8 is rejected under 35 U.S.C. 102(e) as being anticipated by US 6,021,564 (hereafter Hanson).

Hanson discloses, referring to figure 1, a printed circuit board (1) comprising; an insulative substrate (7) an upper surface pattern (9) and a lower surface pattern (5) provided, repectively on an upper and lower surface of the insulative substrate; and a blind via hole (11) for electrically connecting the upper surface pattern and the lower surface pattern, wherein an upper portion of the blind via hole is opened and a bottom of the blind via hole is covered by the lower surface pattern, the thickness of the upper surface pattern (5 micrometers, see col. 10, lines 25-30) being less than that of the lower surface pattern (19 micrometers, see col. 10, lines 1-10).

### Response to Arguments

Applicant's arguments with respect to claim 8 have been considered but are moot in view of the new ground(s) of rejection.

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# Allowable Subject Matter

Claims 3,5-7, 9, 11-17 are allowed.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 703-306-5737. The examiner can normally be reached on Mon.-Th., 9AM - 6:30 PM and alt. Fri. 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0725 for regular communications and 703-308-0725 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JCSN February 8, 2003

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